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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/622,500	08/17/2000	Malla Padidam	TSRI 615 I	8586

7590 05/28/2004

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La Jolla, CA 92037

EXAMINER

HELMER, GEORGIA L

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/622,500

Applicant(s)

PADIDAM ET AL.

Examiner

Georgia L. Helmer

Art Unit

1638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 and 39-50 is/are pending in the application.
- 4a) Of the above claim(s) 7,31,42 and 49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-30, 32-35, 39-41, 43-48 and 50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Status of the Claims***

1. The Office acknowledges receipt of Applicants Response; dated 23 March 2004, Applicant has cancelled claims 36-38, and amended claims 19, 21, and 39. Claims 1-35 and 39-50 are pending. Claims 7, 31, 42, and 49 are withdrawn as being drawn to nonelected inventions. Claims 1-6, 8-30, 32-35, 39-41, 43-48, and 50 are examined in the instant action.
2. This application contains claims 7, 31, 42, and 49 drawn to an invention nonelected with traverse. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01. This includes deleting recitation of nonelected inventions from the examined claims.
3. This action is made FINAL necessitated by Applicant's amendment.
4. All rejections not addressed below have been withdrawn.
5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 112.2***

6. Claims 1-6 and 8-24 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1638

Claims 1-6 and 8-24 remain rejected as incomplete method claims because the final step of the recited method does not result in the production of the desired product, namely, a "plant resistant to a ssDNA virus".

***Claim Rejections - 35 USC § 112-Enablement***

7. Claims 1-6, 8-24, 28, 36-41, and 43-45 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement, for reasons of record, which are repeated in part below.

Enablement is considered in view of the *Wands* factors (MPEP 2164.01(a)). The enablement issues are: "any ssDNA virus", and "ssDNA of any Inoviridae".

The Office has withdrawn the rejection to the extent that it was based on the use of term "resistance".

Re "any ssDNA virus", and "ssDNA of any Inoviridae":

Re Applicant claims any ssDNA binding protein of any Inoviridae virus and any ss DNA virus.

- Applicant teaches (specification, Table 2, pages 33/4) the working example of the particle gun mediated introduction of a M13 gene 5 protein into tobacco plants to produce various biological response to ToLCV geminivirus. Applicant teaches the use of M13 gene 5 protein ssDNA virus. However, the M13 gene 5 protein is special (specification, page 41) and is not representative of all ss binding proteins. M13 gene 5 protein is a small protein (9.7 kD) and which binds DNA in a sequence independent manner and is totally lacking in enzymatic activity.

Art Unit: 1638

Applicant traverses saying primarily (response, p. 17, lines 1-4) that “nowhere in the specification is the M13 gene 5 said to be ‘special’”, nor does the specification state that the M13 gene 5 protein “is not representative of a single-stranded binding proteins”. Applicant's traversal is unpersuasive. The Examiner has not so asserted such statements. Furthermore, Applicant’s specification describes qualities of M13 gene 5 protein which distinguish it from other viral proteins, binding proteins, and proteins in general. These distinguishing qualities indicate M13 gene 5 protein’s “special-ness”.

Applicant traverses saying primarily that ‘it is eminently reasonable to predict that M13 gene 5 protein would be capable of binding to any single-stranded viral genome’ (p. 19, lines 1-8). Applicant's traversal is unpersuasive. This is a conclusionary statement without evidentiary support. Applicant voices various contingencies, which if true, make speak for the predictability of the claimed invention. However, any such evidence of predictability is lacking.

Applicant traverses in response to Examiner assertion of “no Guidance” saying primarily (page 19, ¶ bridging to p. 20) that the specification discloses a model system, comprising resistance to ToLCV conferred by introducing M13 gene 5 protein into tobacco protoplasts and plants. Applicant's traversal is unpersuasive. Applicant’s arguments are not commensurate in scope with the claims, as only claims 23 and 38 are drawn to geminivirus and M13 gene 5 proteins.

REMARKS

Art Unit: 1638

8. SEQ ID NO: 3 is free of the prior art of record. The claimed invention is free of the prior art of record.
9. No claim is allowed.
10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

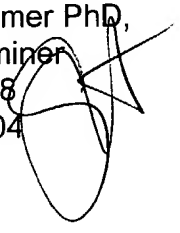
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Georgia L. Helmer whose telephone number is 571-272-0796. The examiner can normally be reached on 8:30 - 5:00.

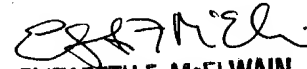
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on 571-272-0804. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1638

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Georgia Helmer PhD,  
Patent Examiner  
Art Unit 1638  
May 24, 1004



  
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PRIMARY EXAMINER  
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